

Observations of Occultations of Stars by the Moon and Phenomena of Jupiter's Satellites, made at the Royal Observatory, Greenwich, in the year 1888.

(Communicated by the Astronomer Royal.)

Occultations of Stars by the Moon.

Day of Obs.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation.	Observer.
1888, Jan. 28 (a)	Disapp. No. 157	S.E. Equat.	220	Eclipsed	h m s 10 33 49.94	M.
28	"	Cooke Equat.	200	"	10 42 32.00	H.
28	"	Lassell Refl.	170	"	10 52 2.85	H. T.
28	"	Cooke Equat.	200	"	10 52 3.45	H.
28 (b)	"	Lassell Refl.	170	"	11 1 23.35	H. T.
28	Reapp.	Lassell Refl.	170	"	11 3 33.35	H. T.
28 (c)	"	S.E. Equat.	220	"	11 4 (18.74)	M.
28	"	Cooke Equat.	200	"	11 3 33.12	H.
28 (d)	"	Lassell Refl.	170	"	11 7 (0.35)	H. T.
28 (e)	"	Cooke Equat.	200	"	11 6 11.42	H.
28	Disapp.	Lassell Refl.	170	"	11 27 34.35	H. T.
28 (f)	"	Cooke Equat.	200	"	11 27 32.43	H.
28	Reapp.	Lassell Refl.	170	"	11 34 23.85	H. T.
28	"	Corbett Refr.	110	"	11 34 24.95	L.
28 (g)	"	Lassell Refl.	170	"	11 37 39.35	H. T.
28	"	Lassell Refl.	170	"	11 54 3.55	H. T.

Day of Obs.	Phenomenon.	Telescope.	Power.	Moon's Lib.,	Mean Solar Time of Observation.	Observer.
1888, Jan. 28 (<i>h</i>)	Reapp.	164				
28	"	164	200	Eclipsed	h m s 11 54 13.64	M.
28 (<i>i</i>)	"	165	110	"	11 54 4.85	L.
28	"	181	200	"	11 55 1.54	M.
28	"	180	170	"	11 59 20.35	H. T.
28 (<i>j</i>)	"	180	170	"	12 4 35.55	H. T.
28	"	180	200	"	12 4 42.24	M.
	"	180	110	"	12 4 36.55	L.
May 20	Disapp. <i>b</i> Virginis	Altaz.	100	Dark	12 55 33.75	H.
24 (<i>k</i>)	" η Libræ	Altaz.	100	"	10 51 40.37	A. D.
July 19 (<i>l</i>)	" Piazzæ XVI. 236	Altaz.	100	"	10 26 34.00	T.
23 (<i>m</i>)	Reapp. 20 Capricorni	E. Equat.	70	Bright	10 47 7.25	H. T.
Oct. 20	Disapp. μ Ceti	E. Equat.	140	"	11 38 53.26	A. D.
20 (<i>n</i>)	" μ Ceti	Altaz.	100	"	11 38 (28.38)	J. P.

The Nos. of the stars observed on the occasion of the total eclipse of the Moon, January 28, are taken from the catalogue of stars printed and circulated by Professor Struve.

Notes.

- (a) Doubtful if occulted by the Moon or hidden by cloud.
- (c) Doubtful if the reappearance was from behind the Moon or cloud.
- (e) Observed a bright speck slightly within the Moon's limb; sky clouded over immediately.
- (f) The star seemed to touch the Moon's limb, and get rapidly fainter, 10' before it disappeared.
- (g) Observation doubtful.
- (i) It is believed that the real occultation was observed, although the Moon was partly hidden by cloud at the time.
- (j) Clouds passing.
- (k) Observation difficult, owing to faintness of the star before disappearance.
- (l) Star faint.
- (m) Very faint when first seen.
- (n) Observation doubtful.
- (b) Observation doubtful.
- (d) Observation doubtful.
- (h) Reappearance instantaneous and well observed.

Phenomena of Jupiter's Satellites,

Day of Obs.	Satellite,	Phenomenon,	Telescope,	Power.	Mean Solar Time of Observation. h m s	Mean Solar Time of N.A. h m s	Observer.
1888, Jan. 5	III.	Ecl. R. First seen	Altaz.	100	17 38 9	17 38 2	H. T.
Apr. 18 (a)	III.	Tr. Ing. First contact	E. Equat.	210	16 12 43	16 22	"
18	III.	Bisection	"	"	16 20 13		"
29 (b)	III.	Occ. R. First seen	"	"	11 7 58	11 8	L.
29	III.	Last contact	"	"	11 15 47		"
May 5	II.	Ecl. D. Began to fade	Altaz.	100	11 34 35	11 43 33	A. D.
5	II.	Last seen	"	"	11 42 33		"
5 (c)	II.	Occ. R. First seen	Lassell Refl.	310	14 51 13	14 55	H. T.
9	I.	Ecl. D. Began to fade	E. Equat.	210	10 54 31		L.
9	I.	Bisection	"	"	10 56 26	10 59 13	"
9	I.	Last seen	"	"	10 58 37		"
10 (d)	I.	Tr. Egr. First contact	"	70	10 32 58	10 33	A. D.
10	I.	Last contact	"	"	10 35 48		"
12	II.	Ecl. D. Began to fade	"	"	14 14 40	14 18 42	T.
12	II.	Last seen	"	"	14 18 4		"
24	III.	Tr. Egr. Bisection	Altaz.	100	10 26 5	10 29	A. D.
24	III.	Last contact	"	"	10 30 29		"
31	III.	Tr. Ing. First contact	Lassell Refl.	289	12 4 37		H. T.
31	III.	Bisection	"	"	12 11 52	12 12	"
31	III.	Last contact	"	"	12 20 7		"